

PCT

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)



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| Applicant's or agent's file reference NG01H67P-WO | FOR FURTHER ACTION See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416) | |
| International application No. PCT/EP 03/10474 | International filing date (day/month/year) 19.09.2003 | Priority date (day/month/year) 19.09.2002 |
| International Patent Classification (IPC) or both national classification and IPC E21B47/022 | | |
| Applicant LATTICE INTELLECTUAL PROPERTY LTD et al. | | |

- This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.
- This REPORT consists of a total of 5 sheets, including this cover sheet.

☐ This report is also accompanied by ANNEXES, i.e. sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).

 These annexes consist of a total of sheets.

- This report contains indications relating to the following items:
 - ☒ Basis of the opinion
 - ☐ Priority
 - ☐ Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
 - ☐ Lack of unity of invention
 - ☒ Reasoned statement under Rule 66.2(a)(ii) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
 - ☐ Certain documents cited
 - ☐ Certain defects in the international application
 - ☐ Certain observations on the international application

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| Date of submission of the demand 07.04.2004 | Date of completion of this report 14.09.2004 |
| Name and mailing address of the international preliminary examining authority:  European Patent Office D-80298 Munich Tel. +49 89 2399 - 0 Tx: 523656 epmu d Fax: +49 89 2399 - 4465 | Authorized Officer Bellingacci, F Telephone No. +49 89 2399-2784  |

**INTERNATIONAL PRELIMINARY
EXAMINATION REPORT**

International application No. **PCT/EP 03/10474**

I. Basis of the report

1. With regard to the **elements** of the international application (*Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report since they do not contain amendments (Rules 70.16 and 70.17)*):

Description, Pages

1-7 as originally filed

Claims, Numbers

1-18 as originally filed

Drawings, Sheets

1/1 as originally filed

2. With regard to the **language**, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.

These elements were available or furnished to this Authority in the following language: , which is:

- ☐ the language of a translation furnished for the purposes of the international search (under Rule 23.1(b)).
- ☐ the language of publication of the international application (under Rule 48.3(b)).
- ☐ the language of a translation furnished for the purposes of international preliminary examination (under Rule 55.2 and/or 55.3).

3. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:

- ☐ contained in the international application in written form.
- ☐ filed together with the international application in computer readable form.
- ☐ furnished subsequently to this Authority in written form.
- ☐ furnished subsequently to this Authority in computer readable form.
- ☐ The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.
- ☐ The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

4. The amendments have resulted in the cancellation of:

- ☐ the description, pages:
- ☐ the claims, Nos.:
- ☐ the drawings, sheets:

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5. ☐ This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed (Rule 70.2(c)).

(Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report.)

6. Additional observations, if necessary:

V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

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|-------------------------------|-------------|-----------------|
| Novelty (N) | Yes: Claims | 2-8,10-12,16,17 |
| | No: Claims | 1,9,13-15,18 |
| Inventive step (IS) | Yes: Claims | |
| | No: Claims | 1-18 |
| Industrial applicability (IA) | Yes: Claims | 1-17 |
| | No: Claims | 18 |

2. Citations and explanations

see separate sheet

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EXAMINATION REPORT - SEPARATE SHEET**

International application No. PCT/EP 03/10474

Reference is made to the following documents:

- D1 = US 5 320 180 A
- D2 = US 5 795 991 A
- D3 = EP 0520 733 A
- D4 = US 5 964 294 A
- D5 = US 6 179 066 B1

V - Reasoned statement under Rule 66.2 (a)(ii)

V-1 D1, which is considered as the closest prior art, describes a pitch sensor tool (col. 2, lines 32-35) for a stem boring or drilling machine (fig. 3) having a stem (18) and a drilling head (30), comprising:

a generally cylindrical housing (34) adapted to be coupled to said stem and to said drilling head,

a pitch sensing device (col. 5, lines 2-9), the pitch sensing device being disposed in or on the housing and being adapted to transmit a reading of the sensed pitch of the pitch sensor tool.

The subject-matter of claim 1 is therefore not new and the claim does not meet the corresponding requirement of Art. 33(2) PCT.

The same conclusion applies to dependant claim 9, see col. 5, lines 2-9.

V-2 It is standard practice to protect impact-sensitive parts in tools as in D1 by means of shock absorbing means (see D2, abstract), and as well to locate them in dedicated compartment (see D2, fig. 1). Claims 2 and 3 do not meet therefore the inventive step requirement of Art. 33(3) PCT.

V-3 The features of claims 4 to 8 are either known or made obvious by D3 and D4, see col. 3, lines 32-42 and respectively col. 1, lines 37 - 65.

V-4 Claims 10 to 12 specifies features routinely used in tools as in D1 and therefore the claim do not meet the inventive step requirement of Art. 33(3) PCT.

V-5 The features additionally specified in claims 13 and 15 are also known from D1, and also said claims therefore do not meet the novelty requirement of Art. 33 PCT (at least if considered as directly dependant on claim 1).

V-6 The subject-matter of claim 14 is not clear, as a "clock" sensor is not suitable to "transmit a reading". As far as the claim can be understood its subject-matter

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appears however to be not new in the light of D1, which is also provided with means for transmitting the reading of the pitch sensor (see fig. 3)

- V-7 The subject-matter of claims 16 and 17 do not involve an inventive step in the light of D3 and respectively D5, see claim 1.
- V-8 Claim 18 does not specify explicitly any feature, but merely refers to the drawings. As it is not possible to univocally establish which specific features should be seen as specified in the claim, it is not possible to conclude that said undefined features are new, inventive or industrially applicable, and the claim therefore does not meet the requirements of Art. 33 PCT.
- V-9 The following objections are also raised:
- a) The independent claims are not properly cast in the two part form, with those features which in combination are part of the prior art (D1) being placed in the preamble, contrary to the requirements of Rule 6.3(b) PCT.
 - b) The features of the claims are not provided with reference signs placed in parentheses (Rule 6.2(b) PCT).
 - c) Contrary to the requirements of Rule 5.1(a)(ii) PCT, the relevant background art disclosed in D1 to D3 is not mentioned in the description, nor are said documents identified therein.
 - d) Claim 18 contains references to the description and/or the drawings. According to Rule 6.2(a) PCT, claims should not contain such references except where absolutely necessary, which is not the case here.